

Radicular Pain: Mind Over Matter

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Patient History:

- 49 year old female with history of overtreated hypothyroidism, bilateral carpal tunnel syndrome and chronic right shoulder pain refractory to two subacromial injections.
- Presented with 2 months of dull neck pain over both sides of the neck with numbness extending down to both hands, right worse than left and a significantly decreased ROM of the right shoulder.
- Refractory to diclofenac gel, prednisone and cyclobenzaprine.

Physical Exam:

- Bilateral cervical paraspinal muscle tenderness.
- Decreased sensation in the C5-T1 distribution on the right side.
- Active and passive range of motion of right shoulder significantly reduced in all directions.
- Neer's and Hawkins' positive.
- Spurling's negative.

Labs:

- TSH 0.01 (suppressed)
- Free T4 1.4
- HGB A1c 5.4
- CBC/CMP nml

Imaging:

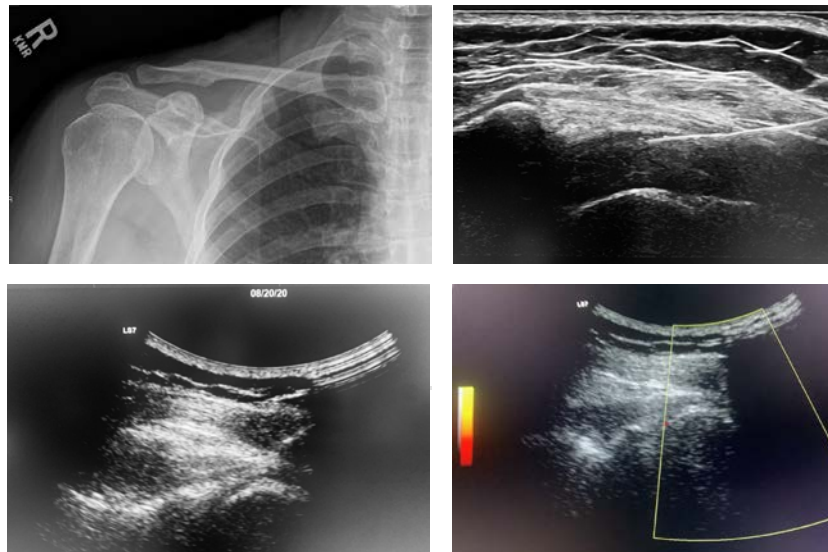
- CT neck performed at another facility was normal.
- Right shoulder Xray was normal.

Differential Diagnosis:

1. Adhesive capsulitis
2. Cervical stenosis with myelopathy
3. Cervical radiculopathy +/- double crush syndrome
4. Parsonage-Turner Syndrome
5. Functional neurological symptom disorder

Treatment:

- Ultrasound-guided glenohumeral joint injection
- Posterior approach
- For both diagnostic and therapeutic reasons



Pictures (left to right):

1. Normal Xray of the right shoulder
2. Scan from subacromial injection (4 months prior)
3. Scan from GHJ injection
4. Scan from GHJ injection showing negative doppler

Outcome:

- Near complete resolution of symptoms including paresthesias of hands and marked improvements in range of motion of shoulder.

Follow-Up: 30 days after GH joint injection

- Shoulder/neck pain have not returned
- Right shoulder ROM normal
- Numbness in hands have not returned

Discussion:

- This case illustrates the importance of considering functional neurological symptom disorder as a possible cause of musculoskeletal pain and neuropathy.
- DSM-5 describes FNSD as disabling or distressing motor or sensory symptoms with evidence of incompatibility with a structural disease process.
- In this patient confirmed by resolution of contralateral as well as ipsilateral symptoms with injection of the glenohumeral joint.
- Although the patients constellation of signs and symptoms may not be compatible with a known disease process, this does not exclude the possibility of underlying organic pathology that may be responsible for one or more symptoms.

References:

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3. Kennedy DJ, Mattie R, Nguyen Q, Hamilton S, Conrad B. Glenohumeral Joint Pain Referral Patterns: A Descriptive Study. *Pain Med.* 2015 Aug;16(8):1603-9. doi: 10.1111/pme.12797. Epub 2015 Jul 16. PMID: 26184392.
4. Popkirov S, Hoeritzauer I, Colvin L, et al Complex regional pain syndrome and functional neurological disorders – time for reconciliation *Journal of Neurology, Neurosurgery & Psychiatry* 2019;90:608-614.